CRYSTAL GROWTH

Patent Number: JP62232919
Publication date: 1987-10-13
Inventor(s): DOI KONEN; others: 02
Applicant(s): RIKAGAKU KENKYUSHO
Requested Patent: ☐ JP62232919
Application Number: JP19860076284 19860402
Priority Number(s):
IPC Classification: H01L21/205; H01L21/263
EC Classification:
EC Classification:
Equivalents: JP2652630B2

Abstract

PURPOSE:To realize ideal atomic layer epitaxy,by supplying raw material gases alternately and performing luminous radiation on a surface of a substrate crystal.
CONSTITUTION:At least two kinds of raw material gases are alternately supplied in a vapor epitaxial growth method of compound crystal, and luminous radiation is performed on a surface of a substrate crystal. Then, growth temperature is made to become low, and therefore thermal decomposing reaction of the compound in the raw material gas is suppressed, so that surface photo-chemical reaction becomes a main one. Therefore, atomic layers are made to epitaxially grow digitally one by one on the substrate crystal. Hence, ideal atomic layer epitaxy is realized.